REMARKS

In the Office Action mailed August 10, 2006, the Examiner objected to the drawings as failing to comply with 37 C.F.R. § 1.84(p)(5); rejected claims 10 and 15 under 35 U.S.C. § 112, second paragraph, for insufficient antecedent basis; rejected claims 1-27 and 29-32 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,188,588 to Schoendorfer et al. ("Schoendorfer"); and rejected claims 10, 15, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Schoendorfer in view of U.S. Patent No. 4,885,001 to Leppert.

By this Reply, Applicants amend the specification to overcome the drawings objection; amend claims 1, 3-5, 8-10, 12, 15-20, 22, 23, 27, and 29-32, and cancel claims 2, 6, 7, 11, 13, 14, 21, 24-26, and 28. Claims 1, 3-5, 8-10, 12, 15-20, 22, 23, 27, 29-32, and 33-54 are currently pending in this Application, of which claims 1, 3-5, 8-10, 12, 15-20, 22, 23, 27, and 29-32 are presented for examination and claims 33-54 are withdrawn from consideration.

At the outset, Applicants note that claim 1 has been amended to include all of the limitations of canceled claims 2, 6, 7, 11, 13, 14, 21, 24-26, and 28. In addition, claim 1 has been amended to recite "said second arterial and venous chambers being solidly joined with one another to form a box-shaped structure, said box-shaped structure being separate from said integrated structure." Support for this further change to claim 1 may be found in the specification, for example, at page 25, lines 1-8 and in Fig. 1.

Applicants traverse the Examiner's objection to the drawings as failing to comply with 37 C.F.R. § 1.84(p)(5). The Examiner bases the drawings objection on the assertion that the drawings "do not include the following reference sign mentioned in the description: **953** . . . [and] they include the following reference character not mentioned

in the description: **963**." (Office Action at 2.) Applicants respectfully submit that the Examiner's objection is now moot in view of Applicants' amendment of the specification to replace reference character 953 with 963. Accordingly, Applicants ask the Examiner to withdraw the objection to the drawings.

The Examiner rejected claims 10 and 15 under 35 U.S.C. § 112, second paragraph, for insufficient antecedent basis. Applicants respectfully submit that the Examiner's rejection is now moot in view of Applicants' amendment of claims 10 and 15. Accordingly, Applicants ask the Examiner to withdraw the rejection of claims 10 and 15 based on § 112, second paragraph.

Applicants respectfully traverse the Examiner's rejection of claims 1-27 and 29-32 under 35 U.S.C. § 102(b) as being anticipated by Schoendorfer. Schoendorfer does not disclose every element of amended claim 1, for example, and thus does not anticipate amended claim 1. The Examiner contends that Schoendorfer discloses a circuit having "at least one arterial chamber (64b) arranged on the withdrawal line (10b) between the pump portion (P3) and the second outlet end (22b) of the withdrawal line." (Office Action at 4.) As depicted in Fig. 6 of Schoendorfer, however, blood exiting "whole blood compartment 64b" leaves through "outlet port 94" and enters pump P3. The blood exits pump P3, flows through separator 20b and through line 22b, which the Examiner refers to as "the second outlet end (22b) of the withdrawal line." (Office Action at 4.) Accordingly, Schoendorfer discloses a circuit in which the pump (P3) is between the blood compartment 64b (the alleged "arterial chamber") and line 22b (the alleged "second outlet end of the withdrawal line"). Thus, Schoendorfer does not disclose "at least one arterial chamber arranged on the withdrawal line between said

pump portion and said second outlet end of the withdrawal line" (emphasis added), as recited in amended claim 1.

The Examiner also contends that Schoendorfer discloses a "first duct (50)" wherein "a part of duct (50) passes through at least a central portion of the integrated structure (16) in which the two chambers (64, 66) are placed beside the other." (Office Action at 5.) The Examiner does not contend, nor does Schoendorfer disclose, however, a "first duct . . . arranged between the arterial and venous chambers" (emphasis added), as now recited in amended claim 1. Draw tube 50 in Schoendorfer, which the Examiner asserts is a "first duct," is not arranged between the two chambers, as depicted in Figs. 2, 4, and 5 of Schoendorfer. Nor does any other portion of Schoendorfer disclose a first duct "arranged between the arterial and venous chambers," as recited in amended claim 1.

The Examiner further asserts that "first chamber (64) is an arterial chamber and integrated structure (16) is equipped inside with a second duct (48: c. 8, l. 24) . . . and a part of pathway of followed by second duct (48) is parallel to a part of pathway of first duct (50)." (Office Action at 5-6.) Applicants disagree. Schoendorfer does not disclose a second duct, as the Examiner suggests. The Examiner's contention that reference numeral 48 refers to a draw tube in Schoendorfer is incorrect. The Examiner cites col. 8, line 24 for this contention. The preceding and following sentences of this cited portion of Schoendorfer, taken with Fig. 2, which is described in that section, clearly suggest that "draw tube 48" should be correctly read as "draw tube 50" at column 8, line 24 of Schoendorfer. In fact, everywhere else in Schoendorfer, reference numeral 48 refers to a branch line that fails to meet the claimed "integrated structure being further

equipped inside with at least a second duct," as recited in amended claim 1. For example, Schoendorfer discloses that "blood line 10a has a pair of branch lines 46 and 48 which extend through clamps C2 and C5, respectively, when the harness set is applied to the instrument." (Col. 8, lines 20-24.) Schoendorfer also discloses that "[l]ine 48 connects an inlet port 52 at the lower end of reservoir 16a." (Col. 8, line 25-26.) As discussed above, the sentence falling between the above cited sentences reads "[l]ine 46 extends for connection to a draw tube 48." (Col. 8, lines 24-25.) The correct reading of this sentence, however, should be "[l]ine 46 extends for connection to a draw tube 50." (*See* Fig. 2; line 46 clearly extends to draw tube 50.) Accordingly, Schoendorfer does not disclose "said integrated structure being further equipped inside with at least a second duct . . . " (emphasis added), as recited in amended claim 1.

The Examiner further contends that Schoendorfer discloses an "integrated structure (fig. 8) having at least a pair of pump portions (P1, P4) connected to two opposite ends of a pump portion of the return line (10a) and designed to be coupled to a pump (c. 13, ll. 4-7)." (Office Action at 6.) Schoendorfer does not disclose, however, "said integrated structure having at least a pair of pump portion **connections** connected to two opposite ends of a pump portion of the return line" (emphasis added), as recited in amended claim 1. The cited portion of Schoendorfer does not disclose this claimed feature. The cited portion of Schoendorfer does not disclose this claimed feature. Rather, the cited portion of Schoendorfer discloses that "[p]ump P1 reversed and packed cells are pumped from compartment 66b through branch line 48b, past open clamp C5 and through line 10a fro reinfusion into the donor." (Column 13, lines 4-7.) Moreover, Schoendorfer discloses that pump portion 53b of the return line connected to

pump P4 has one end connected to pump portion connection 96 of the integrated structure, however the opposite end of the pump portion 42b is connected to separator 20b (see Fig. 6) and not to a second pump portion connection on the integrated structure. Accordingly, as noted above, Schoendorfer fails to teach the claimed "integrated structure having at least a pair of pump portion **connections** connected to two opposite ends of a pump portion of the return line" (emphasis added), as recited in amended claim 1.

The Examiner also contends that Schoendorfer discloses an "integrated structure (16) [that] is equipped inside with first connection cavity (53b) putting in fluid communication at least one of the pump portion (P4) connections with a venous chamber (66b) and second connection cavity (46b) putting in fluid communication at least on the pump portion connections with a venous outlet connections (c. 13, lines 17-23)." (Office Action at 7.) Applicants disagree. The cited portion of Schoendorfer does not disclose a "first connection cavity" or a "second connection cavity" that is "equipped inside" the integrated structure, as required by amended claim 1. In fact, reference numeral 53b, cited by the Examiner as a first connection cavity, depicts a branch line that is clearly external to reservoir 16b in Fig. 6 of Schoendorfer. Thus, Schoendorfer does not disclose "said integrated structure being further equipped inside with a first connection cavity . . . and a second connection cavity," as further recited in amended claim 1.

Applicants further point out that Schoendorfer fails to teach or suggest a "second arterial and venous chambers being solidly joined with one another to form a box-

shaped structure, said box-shaped structure being separate from said integrated structure," as further recited in amended claim 1.

Accordingly, for at least the reasons discussed above, Schoendorfer does not teach every element of amended claim 1. Thus, amended claim 1 is allowable over Schoendorfer. Moreover, claims 3-5, 8-10, 12, 15-20, 22, 23, 27, and 29-32 are allowable due at least to their dependence from allowable amended claim 1.

Applicants also respectfully traverse the Examiner's rejection of claims 10, 15, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Schoendorfer in view of Leppert. The Examiner concedes that Schoendorfer "does not expressly disclose a second venous chamber and second arterial chamber." (Office Action at 7.) The Examiner contends, however, that Leppert "teaches the ability of a the [sic] volumes in second venous and arterial chamber to increase and decrease thereby returning blood to the patient faster in the return phase thereby speeding up flow of blood through the system thus expressing the desire and motivation for second venous and arterial chambers." (Office Action at 7-8.) Leppert teaches additional separate arterial and venous chambers. (See Fig. 1.) Leppert does not teach, however, "said second arterial and venous chambers being solidly joined one to the other to form a box-shaped structure," as recited in amended claim 1. Leppert fails to cure the above-mentioned deficiencies of Schoendorfer. Claims 10 and 15 (28 having been canceled) are allowable at least due to their dependence from allowable amended claim 1.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

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By: _____

Aaron L. Parker
Reg. No. 50,785